## **RECORDS**

The Continental Motors O-470- S, serial number 1032759, was a factory remanufactured engine installed on February 21, 2017 at an airplane total time of 3908.2 hours. Continuity was established from the throttle, mixture, and propeller controls in the cockpit to their respective arms in the engine compartment.

2/21/2017 N7302S Tach and AFTT 3908.2 Engine TT -0- TSOH -0-

Installed factory rebuilt engine O-470SiB S/%. 1032759 into Cessna 182P N73025 in accordance with Cessna 182 Ports and Maintenance manuals. Installed new oil filter and serviced with 12 quarts Aeroshell 100 mineral oil. Installed new spark plugs, checked ignition timing and test ran with no leaks or defects noted.

Picture 01: Logbook Entry for Engine Change

The oil filter adapter was installed on the engine under FAA Supplemental Type Certificate (STC) SE09356SC. According to the owner, he installed the oil filter adapter upon receipt of the engine in February 2017. There were no documents regarding the installation of the adapter, but in an interview with the owner, he stated that he removed the adapter off the prior engine. The FAA records indicated that engine that was removed, O-470-S (s/n 464449) had the STC installed June 16, 2006. The owner stated that the adapter was off an engine for about one month and could not recall the procedures he used to install the adapter, but thought he would have looked at the manufacturer's instructions and

INSTALLED OIL FILTER ADAPTER AS PER STC SE09356SC AND INSTALLATION INSTRUCTIONS FOR CONTINUED AIRWORTHINESS INSPECT FOR SECURITY AND LEAKAGE AT EACH OIL AND FILTER CHANGE AN AT EACH SCHEDULED INSPECTION

Picture 02: STC Entry in FAA Airworthiness Records

The maintenance records indicate that the oil filter was changed on seven occasions all of which were performed by the owner:

Date	TSMOH	Tach	Performed By
4/18/2017	20.4	3928.6	Owner
6/24/2017	55.6	3963.8	Owner
9/20/2017	103.2	3963.8	Owner
3/24/2018	167.7	4075.9	Owner
7/7/2018	218.1	4126.3	Owner
8/31/2018	267.5	4175.7	Owner
4/26/2019	332.5	4240.7	Owner

Picture 03: Summary of Oil Changes

The tachometer at the accident site read 4250.1 hours. The last they is performed on the airplane consisted of an annual inspection that was recorded as being completed on April 26, 2019 at 4240.7 hours, equating to 9.4 hours prior to the accident or 341.9 total time. The logbook entries and an interview with the personnel revealed that during the last maintenance, the owner change the oil and another maintenance facility had replaced the vacuum pump accessory driveshaft seal.

4	4/26/19 N7302S Tach and AFTT 4240.7 SMOH 332.5
S # T	Changed oil and filter. Inspected filter element/no defects found. Serviced with 12 quarts 100W oil. Checked compression as follows: 1 78/80 #3 70/80 #3 70/80 #4 76/80 #5 78/80 #6 78/80.  Test and the properties of the propertie
Y-26-20	TESTAD AND ROTATED REPLACED VACUUME PUMP ACCESSORY DRIVE Shaft Seal, Tightened Shaft balt for Throthe Arm on Carb.  Replaced induction air Filter. Exhaust Value Leaking on #3  Cylinder. Romp was 70/80, happed exhaust valve. Comp  TEST Now 79/80 with No Leak, Bore scoped Valve. No  Abnormal ities Four Printing that the English has been devienmened to be JAPPENDIX D'  Inspection and has been devienmened to be JAPPENDIX D'  In an airworthy condition.

Picture 04: Logbook Entry for Last Maintenance

The airplane's flight sheets kept a record of hours flown for specific months. The April sheet indicated that there were three flights that occurred since the maintenance, totaling 5.7 hours. The May sheet only had a record of the accident pilot noting a "Hobbs Out" time of 2715.8 hours.

	Transfer	Duty On:	Duty Off:	Total:	Hobbs Out:	Hobbs In:SUI	Total:	Tach In:	Renter	Invoice #
Date:	Instructor	Duty On:	Duty Oit.	Total	110005 000			4243.1	HEURY-033	
42610	7				-	2710,	35	42466	Taller	7422
4/28/19	bored	3:00	720		2710.1	127130	2 1	4144.8	5.5 impson	7429
4/29/19					2713.6	2715.8	2.6	7298.0	7.01111	1
1-111					Contraction of the Contraction o		1			

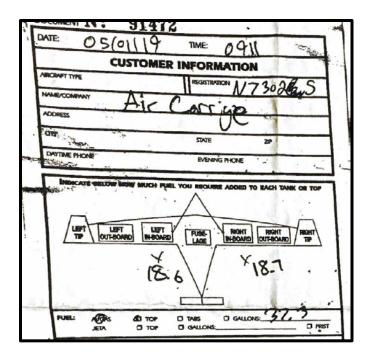
Picture 05: Flight Time Since the Last Maintenance

Inspection Due	Date 4/3 8/20	Tach
Annual	3/34/49	4/38/20
50 hour -		4225
100 hour		4275
Progressive		1.
Transponder	4/30/19	4(30/20
Pitot Static	4/30/19	4/32/20
36 month weight	n/a	
ELT 91.207(d)	3/31/19	4/30/20
ELT Battery	8/31/20	

Picture 06: Airplane Status Sheet

Number	Description	Date Due	Time Due
10/9/11	Seat tracks	8/31/19	4275
	Fuel cap insp n/a by modification	3/31/06	
1 1 1	Magnetos ea 500 hr		n/a by model
96-12-22	Filter adapter	n/a by model	THE RESERVE OF THE PARTY OF THE

Picture 07: Recurring Airworthiness Directives and Service Bulletins



Picture 08: Fuel Receipt